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7590

03/18/2008

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EXAMINER

HAMILTON, CYNTHIA

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

ATTACHMENT\

Applicant's arguments filed 29 February 2008 have been fully considered but they are not persuasive.

The Final rejection of 07 December 2007 made by this examiner stands for the reasons made. The examiner notes for the record that (3,615,450) cited by the examiner as Weber is referenced by applicants as Werber is the same reference and is properly cited as Werber as found in both applicant's arguments and in the Information Disclosure statement filed by applicants 19 July 2006. All reference will be made to Werber in the following remarks.

Applicants allege that Wier (US 6,766,740) is not available as prior art against the present claims because Wier has the earliest "publication date" or issue date of July 27, 2004 which is after the filing date of U.S. application Serial No 10/768,610 which is January 30, 2004. Applicants allege Wier because of this cannot be applied under 35 USC 103(a) as having a date sufficient under 35 USC 102(e) as required to make Wier prior art available against the instant application due to the oldest possible effective filing date of applicant's application being January 30, 2004. The examiner points out that under 35 USC 102(e), the date of criticality is the filing date of Wier which is 21 February 2002. Thus, Wier (US 6,766,740) is properly applied in the Final rejection of 07 December 2007 under 35 USC 103 (a) as of its filing date of 21 February 2002. Applicants make no other arguments with respect to Wier except that it is not prior art. Thus, all rejections made with Wier are maintained for the reasons given.

The examiner notes for the record that applicant's arguments are drawn to whether or not the prior art of the rejection makes *prima facie* obvious the use of actinic radiation comprised of one or more collimated sources of actinic radiation wherein the light rays emanating from said

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one or more sources "strike the photosensitive printing element at an angle that is substantially perpendicular to the surface of the photosensitive printing element at the point of impact."

Applicants do not argue that the examiner erred in the combination of Kanga, Fan and Cushner with respect to all other features of the claimed invention.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants allege that because Werber and Gush are drawn to planer printing elements that what they are not relevant to the problem of collimating a source of actinic radiation such that it would strike a printing element at an angle that is substantially perpendicular to the surface such that image quality can be improved. Further, since Werber and Gush are directed to liquid photosensitive compositions, their disclosures cannot teach or suggest the formation of seamless printing sleeves as found in applicants invention. The examiner argues that Werber was cited as teaching the use of collimated light sources being well known in the relief printing plate art to form finer images. The examiner does concede that the surfaces to be imaged are flat in Werber, but that this does not change the teaching of making finer images with collimated light in general when imaging printing plates. Gush is cited for shown the use of collimated light as well. Thus, applicants have not argued that Werber and Gush were improperly applied, only that Kanga, Fan and Cushner combined with Gush and Werber are not sufficient to make obvious the entire of the instant invention prima facie obvious. The examiner believes that Gush and Werber were

properly applied as used to show that the use of collimated light to image printing plates is well known in the art to obtain finer images.

Applicants argue next that Gelbart does not solve the problems of Kanga, Fan and Cushner because Gelbart does not recognize the problem of the loss of image quality when the source of actinic radiation hits the photocurable surface at an angle instead of perpendicular to the photocurable surface when exposing a curved or arcuate printing surface to actinic radiation. The examiner cited Gelbart as teaching the art recognized use of a reflector to collimate exposure light. Thus, the issue of a flat surface or arcuate surface is not what Gelbart is cited for. Thus, the examiner holds she has used Gelbart properly and maintains her rejection.

Applicants argue that Ohba et al does not cure the deficiencies of Kanga, Fan and Cushner because Ohba used collimated light to record an image on the surface and not to expose the printing element to actinic radiation after the image has been created in the printing element, thus Ohba does not recognize the problem of loss of image quality when the source of actinic radiation hits the printing surface at an angle as discussed above and thus does not cure any of the deficiencies of Kanga, Fan, Cushner, Werber, Gush and Gelbart. The examiner notes that applicants reference the imaged layer formed on top of the layer to be exposed as a "masking layer" in the instant claims. Ohba is cited to show one known form in which collimated light is produced for forming printing plates, as such Ohba is relevant to the issue of how to collimate light when desired with respect to cylinders and apparatuses for exposure of such cylinders. Thus, Ohba is properly cited for what it teaches.

Applicants do not make any arguments with respect to what Wier teaches.

Applicants argue Nellissen does not describe a cylindrical element but a spherical element. The examiner notes that Nellissen is relevant in that the surface is curved and that is sufficiently equivalent to a cylindrical surface as to be drawn to essentially the same problem and thus is properly applied. Applicant argues that the light of Nellissen is "not perpendicular to the point of impact". The examiner notes that the claimed invention is not limited to "perpendicular" but instead to "substantially perpendicular". The examiner holds that Nellissen does show substantially perpendicular striking of the surface. Applicants give no direction as to what "substantially" adds to "perpendicular" in their application. Figure 2 shows a bank of three light wherein perhaps the middle of the collimated light strikes perpendicular to the surface but the outside portions of light do not and thus are "substantially perpendicular". Thus, the teachings of Nellissen are held to be properly applied and to be directed to "substantially perpendicular" in the same manner as shown by applicant in his drawings.

Applicants argue that Trump does not cure the deficiencies of Kanga, Fan, Cushner, Werber, Gush, Gelbart and Nellissen because Trump is alleged to be drawn to internal imaging of a surface of a cylindrical element and not the external surface and thus is not combinable with Kanga, Fan, Cushner, Werber, Gush, Gelbart and Nellissen. Further, because Trump is concerned with high speed resolution equipment for the reproduction of film strips employed in aerial reconnaissance, then Trump is not concerned with solving the same problems as in the instant invention and thus cannot anticipate or render obvious the claimed invention. The examiner cited Trump to show the known method of using a layer of tubular ports, passages or openings through which light would travel to surface to collimate light into parallel beams in order to strike a cylindrical surface to form sharp images on an arcuate surface. Thus, the

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problem solved by Trump by the method of light collimation is essentially the same of lost image fidelity when striking a curved surface and the solution is relevant to light striking any curved surface which is going to have an image formed on it by light striking differentially on the surface thereof. Trump is properly used and properly applied.

Applicants allege that because Karol and Speicher describe a mask "loosely mounted" relative to the cylinder that the mask is not in intimate contact with the surface and thus is not relevant to the instant problem because "it cannot be shown that resolution is improved as in the present invention". Applicants did not address why Karol and Speicher were cited which is the general teaching of using collimated or non-divergent light to image the surface of a photoresist cylinder at an angle perpendicular to the arcuate surface either from inside or outside of the cylinder. As to contact imaging or non-contact imaging, workers in the art know that the issue of image resolution is even more important for off contact imaging than in contact imaging. The examiner also notes that "loosely mounted" does not exclude contact of the mask with the surface. Karol and Speicher were properly applied and used by this examiner. The art is relevant to the use of collimated light to perfect an image. The rejection stands.

With respect to instant claim 12, applicants allege Kitamura et al do not teach overall exposure through the mask layer simultaneously to form the cylinder. The examiner believes that the cited part of Kitamura et al do so teach this point when referencing relief exposure with the chemical lamps of 10b. Thus, Kitamura et al teach what is set forth by the examiner and is properly used in the art rejection.

With respect to Ferree, the examiner has used Ferree in view of Plambeck thus properly combined them for the teaching of what an egg crate baffle is and how it is used to collimate

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light for imaging a printing plate as set forth by Plambeck. Thus, Ferree is properly combined and relevant art because of Plambeck teaching the use of such baffles to collimate light in a manner for imaging relief printing plates. Plambeck and Ferree are not cited to show the obviousness of cylinders but for the generally well known use of collimated light for imaging relief printing surfaces.

The rejection stands for reasons of record set forth in the Final Office Action mailed 07 December 2007.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Cynthia Hamilton/  
Primary Examiner, Art Unit 1795

March 10, 2008

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